

Serial No.: 10/780,249

PD030025

Amendments to the Claims

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Please rewrite claims 1 and 3-15. Please cancel claim 2.

1. (Currently Amended) A method for compensating scanning disturbances on optical recording media such as occur in a control loop of a playback or recording unit, in particular as settling amplitude ~~(ESA1)~~ after a disk disturbance ~~(ST)~~, wherein

a follow-up signal ~~(A2)~~ counteracting the settling amplitude ~~(ESA1)~~ is coupled into the control loop as additional offset as a function of the frequency of the occurrence of a disk disturbance ~~(ST)~~ for a prescribed time interval for the purpose of compensating scanning disturbances and that in the case of a settling amplitude that occurs anew in the same direction after approximately one revolution of the optical recording medium, the follow-up signal is increased by at least one step width, and is reduced by at least one step width in the case of a change in direction of the settling amplitude.

2. (Cancelled)

3. (Currently Amended) The method as claimed in claim 2 1, wherein the step width ~~(X)~~ is ~~an extremely~~ the small smallest unit by which an offset (A1) in the control loop can be varied.

4. (Currently Amended) The method as claimed in claim 2 1, wherein the step width ~~(X)~~ of the follow-up signal ~~(A2)~~ is 10 mV, and is varied in a fashion that is linearly or nonlinearly rising or falling.

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5. (Currently Amended) ~~The method as claimed in claim 1,~~ A method for compensating scanning disturbances on optical recording media such as occur in a control loop of a playback or recording unit, in particular as settling amplitude after a disk disturbance, wherein a follow-up signal counteracting the settling amplitude is coupled into the control loop as additional offset as a function of the frequency of the occurrence of a disk disturbance for a prescribed time interval for the purpose of compensating scanning disturbances and wherein the step width (X) of the follow-up signal (A2) has a value of approximately 10 per cent of the amplitude of the settling amplitude (ESA1).

6. (Currently Amended) The method as claimed in claim 1, wherein the prescribed time interval for which the follow-up signal (A2) counteracting the settling amplitude (ESA1) is coupled into the control loop corresponds to the duration of one revolution of the optical recording medium.

7. (Currently Amended) The method as claimed in claim 1, wherein the prescribed time interval for which the follow-up signal (A2) counteracting the settling amplitude (ESA1) is coupled into the control loop corresponds at least to the length of duration of the disk disturbance (ST) or the time interval for which the settling amplitude (ESA1) exceeds a prescribed threshold value.

8. (Currently Amended) The method as claimed in claim 1, wherein the follow-up signal (A2) is inserted into the control loop after the disk disturbance (ST), as early as during the disk disturbance (ST) and in a fashion transgressing the disk disturbance (ST).

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9. (Currently Amended) ~~The method as claimed in claim 1,~~ A method for compensating scanning disturbances on optical recording media such as occur in a control loop of a playback or recording unit, in particular as settling amplitude after a disk disturbance, wherein a follow-up signal counteracting the settling amplitude is coupled into the control loop as additional offset as a function of the frequency of the occurrence of a disk disturbance for a prescribed time interval for the purpose of compensating scanning disturbances and wherein the follow-up signal (A2) is produced in stepwise fashion for large follow-up signal values (A2) in the event of absence of the disk disturbance (ST) after at least one revolution (U).

10. (Currently Amended) ~~The method as claimed in claim 1,~~ A method for compensating scanning disturbances on optical recording media such as occur in a control loop of a playback or recording unit, in particular as settling amplitude after a disk disturbance, wherein a follow-up signal counteracting the settling amplitude is coupled into the control loop as additional offset as a function of the frequency of the occurrence of a disk disturbance for a proscribed time interval for the purpose of compensating scanning disturbances and wherein in the event of a plurality of disk disturbances (ST) during one revolution of the optical recording medium only the settling behavior occurring with the greatest settling amplitude (ESA4) is evaluated and used to form the follow-up signal (A2).

11. (Currently Amended) The method as claimed in claim 1, wherein the follow-up signal (A2) has an amplitude and direction that leads the scanning beam (L) of the optical recording medium in the forward direction of a data track to be scanned after the disk disturbance (ST).

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12. (Currently Amended) ~~The method as claimed in claim 1.~~ A method for compensating scanning disturbances on optical recording media such as occur in a control loop of a playback or recording unit, in particular as settling amplitude after a disk disturbance, wherein a follow-up signal counteracting the settling amplitude is coupled into the control loop as additional offset as a function of the frequency of the occurrence of a disk disturbance for a prescribed time interval for the purpose of compensating scanning disturbances and wherein the method is used for follow-up control of balance trimming.

13. (Currently Amended) An arrangement for compensating scanning disturbances on optical recording media such as occur in a control loop of a playback or recording unit, in particular as settling amplitude (ESA1) after a disk disturbance (ST), wherein a control unit (uG) is provided that, for the purpose of evaluating the settling amplitude (ESA1) of the control loop after a disk disturbance (ST), is connected via an input (E1) to a connection providing an error signal (FE, TE) of the control loop, and is connected to a summation point (S1 or S2) of the control loop that is provided for feeding in a follow-up signal (A2) that counteracts the settling amplitude (ESA1) and is coupled into the control loop as additional offset as a function of the frequency of the occurrence of a disk disturbance (ST) for a prescribed time interval in order to compensate scanning disturbances in the control loop.

14. (Currently Amended) The arrangement as claimed in claim 13, wherein the connection providing the error signal (FE, TE) of the control loop is the input of the control amplifier (RV) of the control loop, and the summation point (S1 or S2) of the control loop is an adder in the connecting lead of an amplifier (PRE) for providing the error signal (FE, TE) in the control loop.

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15. (Currently Amended) A playback or recording unit for compensating scanning disturbances on optical recording media such as occur in a control loop of a playback or recording unit, in particular as settling amplitude (~~ESA~~) after a disk disturbance (~~ST~~), wherein one of claims 4-14 1 and 3-14 is used in the playback or recording unit.